

laboratories and field sites all over the United States and throughout the world.

The NSF plays a critical role in helping the United States maintain its position at the forefront of global innovation and technology. The NSF provides funding and support for research at the Nation's leading universities and laboratories to develop products and materials to further our economy.

Examples of recent discoveries by NSF-funded research include new materials to make solar panels more effective, technologies to make airport screening more efficient, and the world's strongest superglue based on water-loving bacteria.

By supporting students at each phase in the educational system, the NSF helps our future scientists and engineers turn ideas into innovation.

I am particularly pleased that the committee has agreed to include language in the reauthorization that directly ties funding for the Research Experience for Undergraduates Program to funding levels at the NSF. One of the few NSF programs devoted specifically to undergraduates, this program has suffered from a declining budget for the past 3 years. By tying the funding for the program to the overall funding of NSF, we will allow students access to the resources they need to further their research at their own schools and at institutions across the country.

This legislation is not only good for students, teachers, scientists and engineers, but it is good for the United States in our leading the world on our innovation which drives our economy.

I urge my colleagues to join me in supporting this bill. And again, I thank my colleague Representative BAIRD for all of his hard work on this piece of legislation.

□ (1930)

Mr. EHLERS. Mr. Chairman, I yield myself such time as I may consume.

I am pleased to join the speakers in rousing approval of this bill, the National Science Foundation Authorization Act of 2007. As a scientist, I have been familiar with the National Science Foundation almost since its inception. It is an outstanding American institution. It is the best science research institution in the world in terms of their strong peer review and the good results.

Just a few weeks ago, we had the announcement of the latest round of Nobel Prize winners. All of the Nobel Prize winners this year in the sciences were from the United States, and one of them was formerly funded by the National Science Foundation.

The National Science Foundation has now provided funding for 170 individuals who have gone on to win the Nobel Prize. By far, we are the leader among all the Nations, and it is not just our population. It is our ability to engage in meaningful and good research, research that results in earth-changing

results, and that is extremely important to the foundations of science.

The National Science Foundation has done so many good things since its inception, and as I said, it is one of the leaders in the world.

It also has received awards from the Office of Management and Budget just within the past few years as the most efficiently run government agency. Now, that is indeed an important prize. I understand we are going to have a few amendments to try to reduce the budget of the National Science Foundation, and I think it is absurd to punish the best-operated government agency while we are continuing to fund other agencies which do not do as well, and we are not reducing their budget.

Another factor is we often talk in the Congress about investments. Sometimes I think we never spend a penny of our money; we invest it all because everyone talks about their particular project as a good investment. Well, let me tell you, if we are investing money here we will get a higher rate of return on the money that we invest in the National Science Foundation than in any other government agency, except perhaps NIH, simply because the results are so astounding and so ripe for development by the manufacturing sector.

I could give many, many examples, but let me just mention one. A friend of mine, Charlie Townes, a number of years ago, decided that he could develop a laser. Now, LASER stands for lamp amplification by stimulated emission of radiation. The initiative for that discovery came originally from Einstein in the early 1900s. In the 1930s, a theoretical physicist predicted that stimulated emission would result from a photon hitting an excited atom, yielding two photons of the same wavelength and the same phase traveling in the same direction. Mr. Townes decided he could build a laser out of this, and in fact, he did.

I do not know what types of grants he had, but I think the total was probably less than \$10 million. Today, the laser industry is a multi, multi, multi-billion dollar industry.

Every sewer that has been laid in this Nation and most parts of the world for the last 30 years has been leveled with a beam of laser light. Every suit, every piece of clothing that the people in this room are wearing has been cut out by a laser light, not scissors, but lasers guided around, cutting out the patterns before they are sewn together. I could go on and on with many other examples, including medical examples, by the way.

So that small investment of about \$10 million resulted in thousands and thousands of billions of dollars in our economy. That is why it is totally absurd for anyone to think about reducing the budget of the NSF. If anything, we should increase it because the payback on our investment there is so good, so strong, that we should be increasing NSF funding, not decreasing it.

Mr. Chairman, I reserve the balance of my time.

Mr. BAIRD. Mr. Chairman, I just want to say how much I appreciate Dr. EHLERS for his wisdom, his knowledge, his friendship and his leadership on this. There are few Members of Congress, or even, I think, few other people in the country who know these issues as well as Dr. EHLERS. He has been a teacher to students for many years and a teacher to those of us on the committee as well.

I thank Dr. EHLERS for his fine comments.

Mr. Chairman, I yield 2 minutes to the gentleman from Missouri (Mr. CARNAHAN), a valued member of the committee who has led critical efforts on this legislation.

Mr. CARNAHAN. Mr. Chairman, I rise in strong support of H.R. 1867, the National Science Foundation Reauthorization Act of 2007.

I really want to thank Chairman GORDON, Chairman BAIRD and Ranking Member EHLERS for their work on this bill. Under their leadership, our committee has produced a remarkable amount of quality legislation, including this bill before the House tonight.

Our country's global competitiveness is directly linked to the ability of our math, science and engineering professionals to develop innovative technologies, policies and scientific breakthroughs.

Yet while it is important to support these professionals and their industries today, it is perhaps of even greater importance to support their professions and industries of tomorrow.

In order for our Nation to compete with countries around the world, we must ensure that we increase the educational opportunities for our youth to study and pursue careers in math, science and engineering, while also investing in programs to enrich the quality of these opportunities.

Making both research and the education of our children a national priority is not simply an investment in these fields. Our global competitiveness is directly tied to our Nation's economy and national security.

NSF plays a critical role in influencing our global competitiveness as it supports science and engineering across all disciplines.

Each year NSF supports an average of about 200,000 scientists, engineers, educators and students at universities, laboratories and field sites all over the U.S., including many great institutions in my home State of Missouri.

H.R. 1867 authorizes the necessary funds for NSF which will allow the agency to foster relationships between academia and industry in order to spawn U.S. competitiveness and further the Agency's traditions of education in science, technology, engineering and math, the STEM, fields.

I urge my colleagues to invest in the future of our children, in our country's global competitiveness and support this bill.